Financing Social Security:

Issues and Options for the Long Run

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PREFACE

The Social Security program faces financing problems in both the short and the long run, and the Congress will be considering ways to mitigate those problems over the next year. This paper, prepared at the request of the Senate Budget Committee, focuses on the long-run problem, and analyzes a number of options for improving the financial status of the trust funds over the next 75 years. In keeping with the mandate of the Congressional Budget Office (CBO) to provide objective and impartial analysis, this study offers no recommendations.

Patricia Ruggles and Paul Cullinan of the CBO's Human Resources and Community Development Division prepared the paper under the supervision of Nancy M. Gordon and Paul B. Ginsburg. Many people, both outside of CBO and on the CBO staff, provided useful information and helpful comments. The authors especially wish to thank the Social Security Administration's Office of the Actuary, which provided most of the estimates that appear in the paper; particularly helpful were Stephen Goss, Steven McKay, Orlo Nichols, and Wilfredo Cruz. In addition, Robert M. Ball and Robert J. Myers of the National Commission on Social Security Reform, Michael Carozza, John Nelson, and Richard N. Brandon of the Senate Budget Committee staff, James A. Rotherham of the House Budget Committee staff, and Wendell Primus of the House Ways and Means Committee Staff all made useful comments. Within CBO, the authors would like to thank Paul Van de Water, Robert W. Hartman, Richard Mudge, Wilhelmina A. Leigh, and Bruce Vavrichek for their assistance and their comments. The estimates appearing in Appendix C were prepared by Stephen Chaikind and James M. Nason, who also provided useful comments. The manuscript was edited by Francis Pierce and Robert L. Faherty. Norma A. Leake typed the paper and prepared it for publication; Mary V. Braxton typed several early drafts.

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SUMMARY

Under current projections, the Social Security system will face major financing problems early in the next century. These problems will result from an expected decline in the number of workers contributing to Social Security relative to the number of people receiving Social Security benefits. In 1980, there were about five people of working age for every person age 65 or older. By 2030, when the "baby boom" generation has retired, there are expected to be only about two and a half people between 20 and 64 years old for each person 65 or over. As the number of workers declines relative to the number of beneficiaries, those of working age will have to contribute a larger proportion of their earnings to Social Security than is now required, if benefits are maintained at current law levels and no other major changes in the program take place.

This paper discusses the size and the timing of the long-run financing problems of the Social Security system, and analyzes a variety of options to mitigate those problems. It concentrates on the Old Age and Survivors Insurance (OASI) and Disability Insurance (DI) trust funds, the two Social Security trust funds that provide cash benefits for retirees, disabled workers, and their families and survivors.

Although the OASDI funds also face some short-run financing problems, these are chiefly economic rather than demographic in nature, and are not discussed in this paper.[1] In addition, although there have been many proposals over the years to make fundamental changes in the Social Security system, this paper discusses only incremental changes that would improve trust-fund balances over the long run while maintaining the current structure of the system.

THE LONG-RUN PROBLEM

The size of the long-run financing problem for Social Security will depend on economic factors as well as demographic ones. The financial position of the system depends on how fast wages grow relative to prices. This is because the major source of income for the system is a tax on wages, while benefit increases are tied to price changes. If a productive economy

1. Appendix C briefly summarizes these problems, however, and presents some short-run financing options.

permits wages to grow faster than prices, revenues will rise faster than benefit levels--to some extent offsetting the growth in the relative number of beneficiaries.

Nevertheless, even assuming that the economy grows at a moderate rate over the long run, an average annual deficit of about 13 percent of outlays is projected for the Social Security system. This projection is based on the intermediate economic and demographic assumptions of the 1982 Social Security Trustees' Report. Projections such as this are quite sensitive to the assumptions on which they are based, however. Under the Trustees' optimistic assumptions, for example, no long-run deficit is projected over the period as a whole, although outlays exceed income in a few years. Under the pessimistic set, on the other hand, the annual deficit over the next 75 years is projected to average about one-third of outlays.

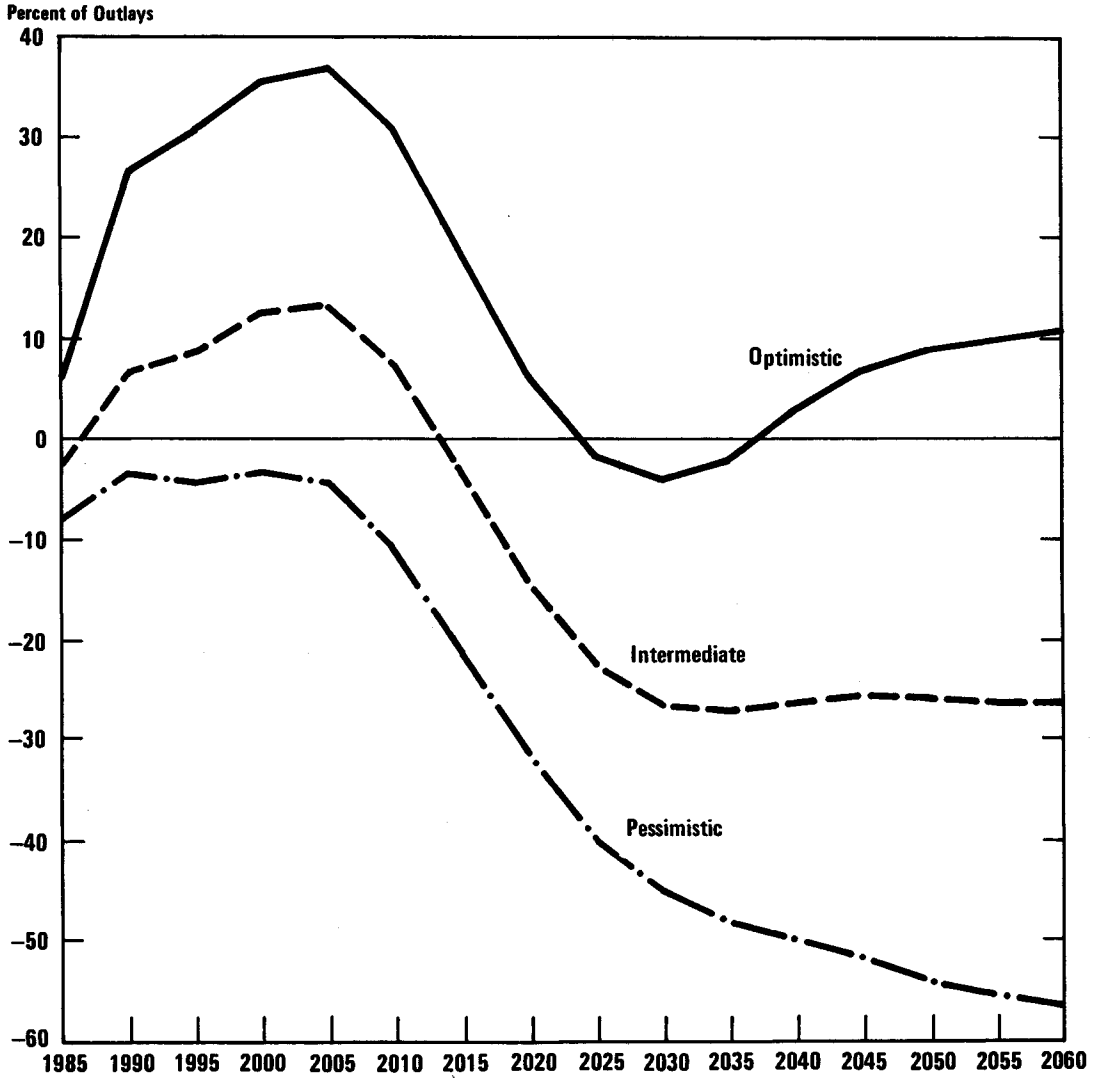
Like the projected deficit, the timing of the financing problem is sensitive to economic and demographic assumptions. Under the intermediate assumptions, which project a moderate rate of economic growth, reserves will be low until the mid-1990s, but in the 20 years between 1995 and 2015 they will grow considerably as trust fund income consistently exceeds outlays (see the Summary Figure). After 2015, reserves are expected to fall rapidly as the baby boom generation retires, and to be exhausted before 2030. Under the pessimistic assumptions, OASDI outlays are projected to exceed revenues over the entire 75 years, though the shortfall would not be as great between 1990 and 2005 as before or after. Only under the optimistic assumptions would the trust funds face no long-run deficit, although even under these assumptions outlays exceed income in 2025-2035.

Even if changes are made in the Social Security system to eliminate its projected deficit on average over the long run, it could still experience temporary financing problems because of short-term economic fluctuations. As the experience of the last few years has demonstrated, trust fund reserves can fall rapidly in periods when price increases exceed wage growth. If such periods recur, temporary insolvency could still be a danger, especially over the next 15 to 20 years when reserve levels will be low.

Long-range projections must be regarded as very uncertain, and some analysts argue that it would be premature to take action now to reduce the size of a long-run deficit that may never materialize. On the other hand, economic and demographic conditions may result in a long-run deficit greater than that projected. Given the uncertainty of the estimates and the potential for severe funding problems, some changes in the system may be desirable now. If economic and demographic conditions should prove to be more favorable than currently projected, future benefits could be increased, or future taxes reduced.

Summary Figure.

OASDI Surplus or Deficit as a Percentage of Outlays, under Three Alternative Sets of Assumptions, 1985-2060



SOURCE: Congressional Budget Office, based on 1982 Annual Report of the Board of Trustees, Federal Old Age and Survivors Insurance and Disability Insurance Trust Funds, Table 29, pp. 67-68. Optimistic assumptions = Alternative I; intermediate assumptions = Alternative II-B; pessimistic assumptions = Alternative III.

NOTE: Figure shows the difference between revenues and costs in each year, rather than OASDI balances. Differences are on an annual basis, and are not cumulative from year to year.

OPTIONS FOR THE LONG RUN

Social Security balances could be improved in two major ways over the long run: benefits could be reduced, or trust fund revenues could be increased.[2] Either approach could be implemented in several alternative ways, as described below. In addition, options that would decrease the sensitivity of trust fund balances to fluctuations in economic performance are outlined.

Benefit Reductions

Reductions in benefits relative to current law could be achieved either by changing the formula used to compute Social Security benefits or by raising the age of retirement. Proposals to change the benefit computation formula would change the relationship between what workers earn over their lifetimes and the benefits they receive when they retire. Under current law, retirement benefits are based on a summary measure of lifetime earnings, to which a formula is applied to arrive at the benefit amount. Two proposals to change this formula to provide lower benefits at any given level of average lifetime earnings are analyzed here--one that would reduce benefits for all earners proportionally, and one that would cut benefits relatively more for those with higher lifetime earnings.

A second way to reduce benefits relative to current law would be to delay retirement, either by reducing benefits for early retirees or by raising the age of eligibility for benefits. Although some do not regard increasing the age of retirement as a benefit cut, this approach would reduce lifetime benefits for most workers, and could be designed to have exactly the same effects on replacement rates--that is, on benefits relative to preretirement earnings--as a change in the computation formula that would provide comparable savings.

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2. The term "reduced," as applied to outlays and benefits in this paper, means reductions relative to the levels that would be reached under current law. Such reductions do not necessarily imply levels lower in dollar terms than those of today. In fact, if wages grow over time as expected, future benefit levels under the benefit-reduction options analyzed here could be higher than today's even after adjusting for inflation, although they would be lower in relation to retirees' lifetime earnings.

Revenue Increases

Trust fund balances could also be improved by increasing revenues. This could be done in several ways--for example, Social Security payroll tax rates could be increased, more workers could be covered by the Social Security system and required to pay Social Security taxes, and Social Security benefits could be subjected to the income tax with the resulting revenues directed to the trust funds. In addition, trust fund revenues could be increased by redirecting funds from other parts of the federal budget to Social Security, although this option would not help to reduce the overall federal budget deficit.

Each of these general approaches to increasing revenues could be implemented in various ways. The specific option to increase payroll taxes analyzed in this paper would involve tax rate increases in 2020 and 2030, which is when they would first become necessary to maintain trust fund balances under the intermediate assumptions. Two different options to extend Social Security coverage are examined--first, coverage of federal employees, and second, coverage of all currently noncovered workers. The particular option to tax benefits discussed here would involve taxing one-half, rather than all, of OASI benefits. The rationale for taxing only one-half of benefits is that income taxes have already been paid by workers on their Social Security contributions, so only the other half of the contributions made on their behalf--those made by their employers--have not yet been taxed.[3]

Stabilization Measures

In addition to changes that would reduce the projected long-run deficit, on average, other options could be implemented to protect the system from the effects of economic fluctuations. These include tying benefit increases to some form of wage index rather than to prices, or to the lower of wage and price increases, so that outlays could not increase faster than revenues. An alternative would be to allow transfers or borrowing from general revenues in periods of poor economic performance.

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3. If Social Security benefits were taxed in the same way as private pensions, with all benefits above the employee's original contribution being taxable, more than 80 percent of benefits would be subject to tax. See Chapter VII for more discussion.

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SUMMARY TABLE. IMPACT OF SELECTED SOCIAL SECURITY OPTIONS ON THE PROJECTED LONG-RUN DEFICIT IN THE SOCIAL SECURITY TRUST FUNDS, UNDER THE INTERMEDIATE ASSUMPTIONS

Option	Percentage Reduction in OASDI Deficit	Timing of Impact	Groups Primarily Affected
		Benefit Reductions	
Benefit Formula Changes			
Proportional reductions in benefits[a]	49	Major impact after 1995	All new recipients; benefits reduced proportionally
Reduction in benefits for those with earnings in top formula brackets[b]	50	Major impact after 1995	All new recipients; effects greatest for high-wage earners
Increases in the Age of Retirement			
Increase in the reduction factor for early retirement[c]	39	Immediate	Recipients retiring before age 65
Increase in the age of eligibility for benefits[d]	57	Phase-in completed in 2012	Future recipients retiring after 2000; greatest impact on those who would have retired early

SOURCE: Congressional Budget Office, based on information provided by the Office of the Actuary, Social Security Administration. Estimates use the intermediate (II-B) assumptions.

a. Proposal to reduce percentage of earnings replaced by benefits proportionally in each bracket of formula by about 8 percent over 12 years, beginning in 1984. See Chapter IV for details.

COMPARISON OF LONG-RUN OPTIONS

This report analyzes options to mitigate the long-run OASDI financing problem in three ways: first, their effectiveness in reducing the projected deficit; second, the timing of the savings or revenue increases resulting from the options in relation to the needs of the trust funds; third, their relative effects on the incomes of different groups of beneficiaries and workers.

SUMMARY TABLE. (Continued)

Options	Percentage Reduction in OASDI Deficit	Timing of Impact	Groups Primarily Affected
Tax Increases			
Increase in Payroll Tax Rates by a Total of 1.1 Percent Each for Employers and Employees	52	Increases in 2020 and 2030	All covered workers
Expansion of Coverage[e]			
Federal employees	15	Immediate	All federal workers
All noncovered workers	29	Immediate	All workers in non-covered employment
Taxation of One-Half of OASI Benefits[f]	28	Immediate	Beneficiaries with taxable incomes, with major impact on those with higher incomes

b. Proposal to index "bend points" in benefit computation formula by 75 percent of wage increases for 12 years, beginning in 1984. See Chapter IV for more details.

c. Administration's May 1981 proposal to reduce benefits for age 62 retirees from 80 percent to 55 percent of full benefits, effective immediately.

d. 1981 National Social Security Commission proposal to raise eligibility age by 3 months per year for 12 years, beginning in 2001.

e. Savings are for implementation as of 1984; could also be phased in.

f. Estimate is preliminary and subject to revision. Savings are for implementation as of 1984; could also be phased in. If one-half of DI benefits were also taxed, total revenue increases would be 33 percent of the projected long-run deficit in OASDI.

Magnitude

The Summary Table shows the long-run impact of the options for reducing benefits and for increasing taxes discussed above. Most would provide long-run savings or revenue increases equal to about one-fourth to one-half of the projected long-run deficit. None would by itself entirely solve the financing problems of the trust funds, although two or more options could be combined to achieve this result.

Timing

Most of the benefit-reduction options would be phased in over some period of time, so their major savings would occur 20 or more years from now. Some of the tax-increase options--the partial taxation of benefits or the acceleration of the payroll tax increases scheduled for 1985 and 1990, for example--could be implemented almost immediately, but others--such as Social Security coverage for new employees in currently noncovered jobs--would take longer to produce their major revenue effects.

Because the long-run financing problems are not expected to arise until after 2015 under the intermediate assumptions, options that would have major impacts before then would increase the buildup in trust fund reserves between 1995 and 2015. This could have some impact on the rest of the budget and the economy. If the budget were to be balanced over this period, for example, the accumulation of even larger reserves than already projected would mean, on a year-to-year basis, reductions in other taxes or increases in spending--a situation that would be abruptly reversed in the succeeding ten years.[4] In the past, furthermore, the buildup of large trust fund reserves has resulted in ad hoc benefit increases, so that some safeguards against such increases might be necessary to ensure enough reserves to offset future trust fund deficits. Postponing action would create a different risk: if the economy did not perform as well as projected under the intermediate assumptions, the trust funds would face even more substantial financing problems, and greater measures would be needed in the future to resolve them.

Effects on Beneficiaries and Workers

The options discussed in this paper would vary in their effects on different groups of beneficiaries and workers. Options to reduce benefits while maintaining adequate retirement incomes for low-income beneficiaries would generally reduce the rate of return--that is, benefits in relation to past Social Security tax payments--for those with high lifetime earnings. That rate of return will already be lower, under current law, than the return received by lower-income workers and further reductions would exacerbate this situation.

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4. While Social Security taxes cannot be spent directly on other programs, additions to the reserves reduce the unified federal budget deficit and take the place of other government borrowing, and in that sense provide additional resources to the budget as a whole. See Chapter VIII for further discussion.